中国认可
国际互认
检测
TESTING
CNAS L6069

Test Report

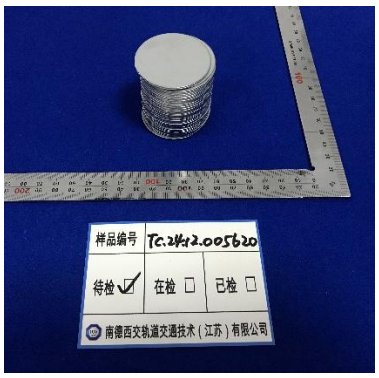
Report No. TC.24.12.005620

Date of Issue 12/24/2024

Applicant: **DSP CO.,LTD**

Applicant address: **439-24, Jangjae-ro (57-1, Saenglim-ri), Saengnim-myeon, Gimhae-si, Gyeongsangnam-do, Republic of Korea**

Description of the test subject:

Sample	Description	Photo
001	Sample Description: Stainless Steel Laminated Product Style No.: INOXTEEL	

Receipt Date of Sample: **12/13/2024**

Date of Testing: **From 12/13/2024 to 12/20/2024**

Sample Submitted: **The sample(s) was (were) submitted by applicant and identified.**

Conclusion:

Test Items			Conclusion
No.	Items	Standard	
1	Burning behaviour	EN 13501-1:2018	A1

Laboratory:
TÜV SÜD SW Rail Transportation Technology (Jiangsu) Co., Ltd.

Phone: +86/ (0) 519- 8123-9872
Fax: +86/ (0) 519- 8123-9872 ext.123
E-mail: czx.qm@tuvsud.com
www.tuvsud.com

Regd. Office:
Innovative Industry Park, No. 377 Wuyinan Road,
National High and New Technology & Industry
Development Zone, Wujin, 213015 P.R. China

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Test Results

1. EN 13501-1:2018 Fire classification of construction products and building elements- Part 1: Classification using data from reaction to fire tests

1.1 EN ISO 1182:2020 Reaction to fire tests for products -- Non-combustibility test

1.1.1 Sample details

Diameter	45mm
Height	50mm

	Temperature (℃)	Humidity	Duration(h)
Precondition	23±2	50±5	≥24
	60±5	--	20-24

1.1.2 Test result

Specimen	1	2	3	4	5	Ave.
Initial furnace temperature (T_i) (℃)	751.3	751.2	751.3	751.4	751.3	751.3
Maximum furnace temperature (T_{max}) (℃)	831.5	818.7	824.1	819.9	829.0	824.6
Final furnace temperature (T_f) (℃)	830.0	818.1	823.0	819.1	828.2	823.7
Furnace temperature rise ΔT (℃) ($\Delta T = T_{max} - T_f$)	1.5	0.6	1.1	0.8	0.8	0.9
Maximum specimen temperature ($T_{s.\,max}$) (℃)	792.3	797.2	794.4	799.0	790.4	794.7
Final specimen temperature ($T_{s.\,f}$) (℃)	791.1	796.2	793.8	798.3	789.9	793.9
Specimen temperature rise $\triangle T_S$ (℃) ($\Delta Ts = Ts._{max} - Ts._f$)	1.2	1.0	0.6	0.7	0.5	0.8
Duration of sustained flaming (t_f)(s)	0	0	0	0	0	0
Initial mass (g)	581.0	582.4	581.5	583.0	582.2	582.0
Final mass (g)	580.8	582.2	581.4	582.8	582.0	581.8
Mass loss (Δm) (%)	0.03	0.02	0.02	0.03	0.03	0.03

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1.2 EN ISO 1716:2010 Reaction to fire tests for products —Determination of the gross heat of combustion (calorific value).

1.2.1 Sample details:

Conditioning	Temperature	Relative humidity	Duration
	23±2℃	50±5%	≥48h

1.2.2 Test results:

Result	1	2	3
m,(g)	0.5009	0.5012	0.5002
Q_{PCS}, (MJ/Kg)	0	0	0
AVG Q_{PCS},(MJ/Kg)	0		

Remark:

m– Mass of the test specimen,
PCS– Is the gross heat of combustion.

EN 13501-1:2018 table 1- classification：

Classification	Test method	Classification criteria
A1	EN ISO 1182[a] and	ΔT≤30℃; and Δm ≤50%; and t_f = 0 s (i.e. no sustained flaming)
	EN ISO 1716	PCS ≤ 2.0 MJ/kg [a] and PCS ≤ 2.0 MJ/kg [b c] and PCS ≤ 1.4 MJ/m^2 [d] and PCS ≤ 2.0 MJ/kg [e]

[a] For homogeneous products and substantial components of non-homogeneous products.
[b] For any external non-substantial component of non-homogeneous products.
[c] Alternatively, any external non-substantial component having a PCS≤ 2.0 MJ/m^2, provided that the product satisfies the following criteria of EN 13823: FIGRA ≤ 20 W/s, and LFS < edge of specimen, and THR_{600s} ≤ 4.0 MJ, and s1, and d0.
[d] For any internal non-substantial component of non-homogeneous products.
[e] For the product as a whole.

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Conclusion:

Test standard	Record	Conclusion
EN ISO 1182	ΔT = 0.9 ℃ Δm = 0.03 % t_f = 0 s	A1
EN ISO 1716	PCS = 0 MJ/kg	

Statement：The test results relate to the behaviour of the test specimens of a product under the particular conditions of the test; they are not intended to the sole criterion for assessing the potential smoke and toxicity hazard of the product in use.

TÜV SÜD SW Rail Transportation Technology (Jiangsu) Co., Ltd.

Prepared by:

Rui Zhang

Approved by:

Wayne Wang

-End of Report-

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